

REMARKS

Status of the Claims

Original claims 1-15 have been canceled and new claims 16-19 are added. Support for new claims 16-19 is found as follows:

- Claim 16 is drawn to a prothrombin activator protease comprising the amino acid sequence set forth in SEQ ID NO: 3. Support for this claim is found on page 1, lines 10-20 of the Specification and in the originally filed sequence listing.
- Claim 17 is drawn to a method for treating prothrombotic disorders in an individual in need thereof by administering to the patient an effective dose of the prothrombin activator protein comprising at least one of the sequences from SEQ ID NOS: 1-5, wherein the effective dose of the prothrombin activator protease prevents blood clot formation. Support for this claim is found in original claim 14 and from line 20, page 16 to line 9, page 17 of the Specification.
- Claims 18 and 19 are drawn to a method for detecting the presence of prothrombin in plasma of a patient by treating plasma obtained from the patient with a prothrombin activator protease comprising at least one of the sequences of SEQ ID NOS: 1-5. Support for this claim may be found in original claim 15 and on page 10, lines 6-21 of the Specification.

1. The Form of the Claims

The Examiner imposed a series of claim objections based on formalities. Applicants have deleted claims 1-15 and added new claims 16-19. Applicants submit that the new claims are in proper form.

2. The Restriction Requirement

The Examiner contends that the application contains groups of invention that are not so linked as to form a single general inventive concept under PCT Rule 13.1. The Examiner has grouped the claims into the following inventions:

Group I, claims 1-11, drawn to a process of purifying soluble proteins of the *L. oblique* bristles;

Group II, claims 12-13, drawn to fragments of the prothrombin activator fraction;

Group III, claims 14, drawn to use of the prothrombin activator in treatment; and

Group IV, claims 15, drawn to use of the prothrombin activator in diagnosis.

In the Examiner's mind, Groups I-IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or a corresponding special technical feature. The Examiner contends that the technical feature common to the claims is known in the prior art, as indicated by the supplementary European Search Report for PCT/BR03/00012, and therefore not special. On these grounds, the Examiner has required restriction of the claims.

The international Examiner alleged that the corresponding technical feature of the claims was a process for purifying LOPAP, and further alleged that the process was anticipated by *Reis et al* (2001). Applicants point out, however, that a corresponding special technical feature of the present claims is the prothrombin activator protease of the invention as recited in SEQ ID NOS.

1-5. Applicants further point out that the amino acid sequence of the prothrombin activator protease set forth in SEQ ID NOs. 1-5, and especially with respect to SEQ ID NO: 3, is non-identical to that taught by any prior art reference, and therefore novel. Accordingly, a corresponding technical feature of the claims, the prothrombin activator protease of the invention, is indeed special. It follows that unity of invention under PCT Rule 13.1 exists, and Applicants respectfully request reconsideration and withdrawal of the restriction requirement. In order to be fully compliant with the restriction requirement, Applicants elect, with traverse, claims directed to methods of treatment using the prothrombin activator protease of the invention, claim 17, which Applicants submit corresponds to the claims of Group III.

3. Conclusion

Applicants respectfully request immediate and early allowance of all the claims, which are drawn to subject matter which meets all statutory patentability requirements.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant(s) respectfully petition(s) for a three (3) month extension of time for filing a reply in connection with the present application, and the required fee of \$1020.00 is attached hereto.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Mark J. Nuell, Registration No. 36,623 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

- Attached is a Petition for Extension of Time.
- Attached hereto is the fee transmittal listing the required fees.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to our Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

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Respectfully submitted,

By Mark J. Nuell
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